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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,478	02/09/2001	Toru Yamaguchi	018842.1162	9443

24735 7590 10/19/2004

BAKER BOTTS LLP
C/O INTELLECTUAL PROPERTY DEPARTMENT
THE WARNER, SUITE 1300
1299 PENNSYLVANIA AVE, NW
WASHINGTON, DC 20004-2400

EXAMINER

LEO, LEONARD R

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/779,478

Applicant(s)

YAMAGUCHI ET AL.

Examiner

Leonard R. Leo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The amendment filed on July 2, 2004 has been entered. Claims 1-10 are pending, and claims 7-10 remain withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Gerstung et al (as permissibly gleaned from Figure 4).

Response to Arguments

The rejection under 35 U.S.C. 112, first paragraph, is withdrawn. In addition to applicants' remarks, the specification discloses in paragraph 37, "Adjacent waving strips 25 are connected **only** at connecting portions between first flat portions 21 and between second flat portions. Length (T) of each connecting portion 26 and 27 in the longitudinal direction of each waving strip is less than or equal to thickness (t) of a plate forming each wave." Thus, both the inner and outer surface of a connecting portion is less than or equal to the thickness of the plate. However, as noted above, the drawings do not properly show this feature.

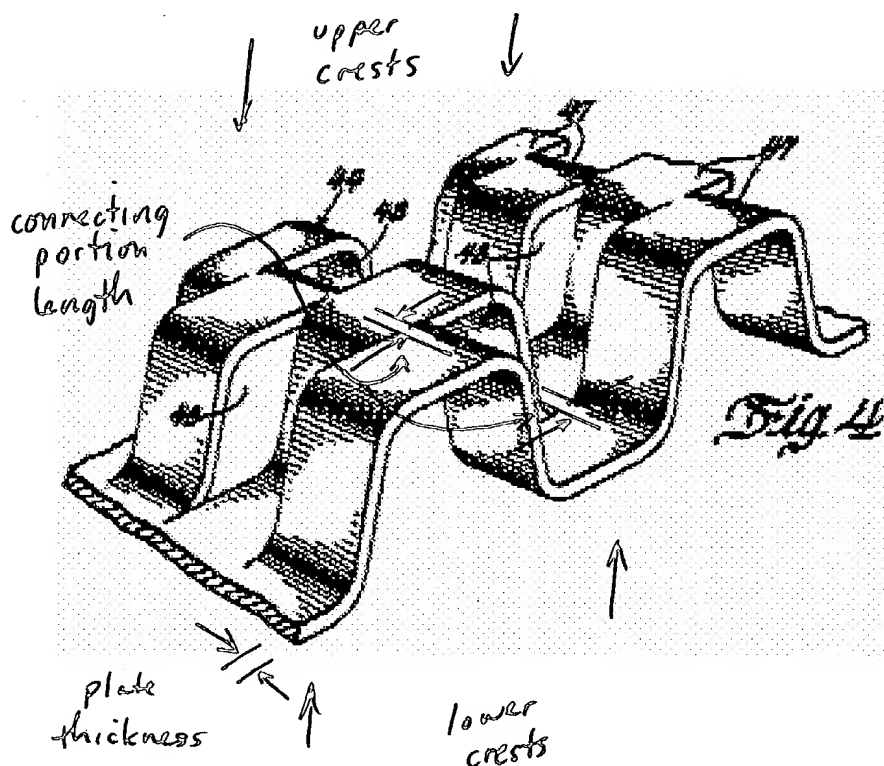
The rejections in view of Swaney, Jr. and Tomoko (JP 7-280,484) are withdrawn. The references do not explicitly disclose a connecting portion having a length less than or equal to thickness of a plate.

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The rejection in view of Gerstung is maintained. The Examiner disagrees with applicants' interpretation of Gerstung (page 2, column 1, lines 60-66) below.

The corrugations in the elements 47 are approximately rectangular in contour and are flat crested and the adjoining elements of each plate are, except where the crests of their corrugations overlap, separated from each other to provide openings 48 through which oil may pass from one corrugation to another lengthwise of the plate.

With respect to the Figure 4 of Gerstung, connecting portions of an outer surface of an upper flat crest and connecting portions of an inner surface of a lower flat crest are disclosed. The connecting portion on the inner surface of the *lower flat crest* is believed to be the same as the connecting portion on the inner surface of the *upper flat crest*. The structure of where the "flat crests are not separated" is where the adjoining elements 47 are uncut and not severed as shown in red below. As permissibly gleaned from the drawing, the length (T) of the connecting portion of Gerstung is less than plate thickness (t).



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As per MPEP 2125, proportions are permissibly gleaned from the drawings. Figure 4 of Gerstung clearly conveys to one of ordinary skill in the art that the connecting portion of the inner surface and the connecting portion of the outer surface have lengths less than the thickness of the plate. Furthermore, the Examiner is not relying upon the proportions to determine a specific dimension. The drawing discloses a proportional relationship between the connecting portions and the plate thickness. Thus, the scale of the drawing is irrelevant.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard R. Leo whose telephone number is 703-308-2611. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on 703-308-2696. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Leonard R. Leo
Primary Examiner
Art Unit 3753

October 18, 2004